

### 13. Foreign Exchange Market, Exchange Rate Risk and Hedging Techniques

#### Foreign Exchange Market

##### What is the Foreign Exchange Market

The foreign exchange market is the market in which participants are able to buy, sell, exchange and speculate on currencies. Foreign exchange markets are made up of banks, commercial companies, central banks, investment management firms, hedge funds, and retail forex brokers and investors.

##### Breaking Down Foreign Exchange Market

The foreign exchange market - also called *forex*, *FX*, or *currency market* - trades currencies. It is considered to be the largest financial market in the world. Aside from providing a floor for the buying, selling, exchanging and speculation of currencies, the forex market also enables currency conversion for international trade and investments.

The forex market has unique characteristics and properties that make it an attractive market for investors who want to optimize their profits.

##### Highly Liquid

The forex market has enticed retail currency traders from all over the world because of its benefits. One of the benefits of trading currencies is its massive trading volume, which covers the largest asset class globally. This means that currency traders are provided with high liquidity.

##### Open 24 Hours a Day, 5 Days a Week

In the forex market, as one major forex market closes, another market in a different part of the world opens for business. Unlike stocks, the forex market operates 24 hours daily except on weekends. Traders find this as one of the most compelling reasons to choose forex, since it provides convenient opportunities for those who are in school or work during regular work days and hours.

##### Leverage

The leverage given in the forex market is one of the highest forms of leverage that traders and investors can use. *Leverage is a loan given to an investor by his broker.* With this loan, investors are able to enhance profits and gains by increasing traders' and investors' control over the currencies they are trading.

For example, investors who have a \$1,000 forex market account can trade \$100,000 worth of currency with a margin of 1 percent, with a 100 : 1 leverage.

The Biggest in the World of Finance..

The foreign exchange market is unique for several reasons, mainly because of its size. Trading volume in the forex market is generally very large because of the number of people who participate, the ease of trading as well as accessibility to the market. As an example, trading in foreign exchange markets averaged \$5.1 trillion per day in April 2016, according to the Bank for International Settlements, which is owned by 60 central banks, and is used to work in monetary and financial responsibility.

##### Benefits of Using the Forex Market

There are some key factors that differentiate the forex market from others like the stock market. There are fewer rules, which means investors aren't held to strict standards or regulations as those in other markets. There are no clearing houses and no central bodies that oversee the

forex market. Most investors won't have to pay the traditional fees or commissions that you would on another market. Because the market is open 24 hours a day, you can trade at any time of day, which means there's no cut off time to be able to participate in the market. Finally, if you're worried about risk and reward, you can get in and out whenever you want and you can buy as much currency as you can afford.

### **Exchange Rate Risk**

*Foreign exchange risk (also known as FX risk, exchange rate risk or currency risk) is a financial risk that exists when a financial transaction is denominated in a **currency** other than that of the base **currency** of the company.*

#### **What is Exchange Rate Risk ?**

*Foreign exchange risk describes the risk that an investment's value may change due to changes in the value of two different currencies. It is also known as currency risk, FX risk and exchange-rate risk.*

Foreign exchange risk sometimes also refers to risk an investor faces when they need to close out a long or short position in a foreign currency and do so at a loss due to fluctuations in exchange rates.

Some types of exposure associated with foreign exchange risk include economic exposure, translation exposure and contingent exposure.

Economic exposure, or forecast risk, refers to when a company's market value is impacted by currency volatility. Translation exposure refers to when foreign exchange rates change, affecting the figures that a multinational company reports to its shareholders. Contingent exposure refers to the risk that firms face when they bid on projects in foreign currencies.

#### **BREAKING DOWN : Foreign Exchange Risk**

*Foreign exchange risk most often affects businesses engaged in exporting and importing products or supplies. It also applies to businesses that offer services in multiple countries and individuals who invest internationally.*

Any time an investor must convert money into another currency to make an investment, that face potential changes in the currency exchange rate between their home currency and the currency of their investment. These changes will affect the investment's value or the business' bottom line.

A business exposes itself to foreign exchange risk by having payables and receivables affected by currency exchange rates. This risk originates when a contract between two parties specifies exact prices for goods or services, as well as delivery dates. If a currency's value fluctuates between when the contract is signed and the delivery date, it could cause a loss for one of the parties.

#### **How Foreign Exchange Risk Works.**

For example, an American liquor company signs a contract to sell a French retailer 100 cases of whiskey for 50 euros per case, or 5,000 euros total. The American company agrees to this contract at a time when the euro and the dollar are of equal value. Thus, the American company expects that when they deliver the whiskey, the agreed upon payment of 5,000 euros will equal roughly \$5,000.

However, it may take a few months for the whiskey company to deliver the goods. In the meantime, Europe undergoes an economic crisis and the value of the euro goes down sharply. By the time the whiskey is delivered, one euro is worth only \$.75. Thus, though the French company still pays the agreed upon 5,000 euros, that amount is now equal to only \$3,750.

### Exchange rate risk for international businesses

*Exchange rate risk is an essential aspect of international business as negative exchange rate fluctuations between the currency in the country where a company or individual is based and the currencies of the countries in which they operate can have significant impact on profit margins, especially for small and medium companies with limited liquidity.*

To offset exchange rate risk, foreign exchange risk management strategies, which involve hedging currency exposures using financial derivatives such as forward contracts, futures or options.

In these cases, some companies can apply hedge accounting procedures to protect their income statement from changes in the fair value of these instruments.

### Hedging Techniques

Exchange rate risk or foreign exchange (forex) risk is an unavoidable risk of foreign investing, but it can be mitigated considerably through hedging techniques. To eliminate forex risk, an investor would have to avoid investing in overseas assets altogether, but this may not be the best alternative from the perspective of portfolio diversification since numerous studies have shown that foreign investing improves portfolio return while reducing risk.

For the U.S. investor, hedging exchange rate risk is particularly important when the U.S. dollar is surging since the risk can erode returns from overseas investments. For overseas investors, the reverse is true, particularly when U.S. investments are performing. This is because the depreciation of the local currency against the USD can provide an additional boost to returns. In such situations, since exchange rate movement is working in the investor's favor, the appropriate course of action is to go unhedged.

The rule-of-thumb is to leave exchange rate risk with regard to your foreign investments unhedged when your local currency is depreciating against the foreign-investment currency, but hedge this risk when your local currency is appreciating against the foreign-investment currency.

### How to Hedge Risk

Here are two ways to mitigate forex risk:

- **Invest in hedged assets :** *The easiest solution is to invest in hedged overseas assets, such as hedged exchange-traded funds (ETFs).* ETFs are available for a wide range of underlying assets traded in most major markets. Many ETF providers offer hedged and unhedged versions of their funds that track popular investment benchmarks or indexes. Although the hedged fund will generally have a slightly higher expense ratio than its unhedged counterpart due to the cost of hedging, large ETFs can hedge currency risk at a fraction of the hedging cost incurred by an individual investor. For example, for the MSCI EAFE index – the primary benchmark for U.S. investors to measure international equity performance – the expense ratio for the iShares MSCI EAFE ETF (EFA) is 0.32%. The expense ratio for the iShares Currency Hedged MSCI EAFE ETF (HEFA) is 0.70% (although the Fund has waived 35 basis points of the management fee, for a net fee of 0.35%).

- **Hedge exchange rate risk yourself :** You most likely have some forex exposure if your portfolio contains foreign-currency stocks or bonds or American depository receipts (ADRs – a common misconception is that their currency risk is hedged, but that is not the case).

### Instruments for Hedging Currency Risk

You can hedge currency risk using one or more of the following instruments:

1. **Currency forwards :** *Currency forwards can be effectively used to hedge currency risk.* For example, assume a U.S. investor has a euro-denominated bond maturing in a year's time and is concerned about the risk of the euro declining against the U.S. dollar in that time frame. The investor can enter into a forward contract to sell euros (in an amount equal to the maturity value of the bond) and buy U.S. dollars at the one-year forward rate. While the advantage of forward contracts is that they can be customized to specific amounts and maturities, a major drawback is that they are not readily accessible to individual investors. An alternative way to hedge currency risk is to construct a synthetic forward contract using the money market hedge. (For more information, read: "The Money Market Hedge: How It Works.")
2. **Currency futures :** *Currency futures are used to hedge exchange rate risk because they trade on an exchange and need only a small amount of upfront margin.* The disadvantages are that they cannot be customized and are only available for fixed dates.
1. **Currency ETFs :** The availability of ETFs that have a specific currency as the underlying asset means that currency ETFs can be used to hedge exchange rate risk. This is probably not the most effective way to hedge exchange risk for larger amounts. However, for individual investors, their ability to be used for small amounts and the fact that they are margin-eligible and can be traded on the long or short side leads them to provide major benefits.
2. **Currency Options :** Currency options offer another feasible alternative to hedging exchange rate risk. Currency options give an investor or trader the right to buy or sell a specific currency in a specified amount on or before the expiration date at the strike price. For example, currency options traded on the Nasdaq are available in denominations of EUR 10,000, GBP 10,000, CAD 10,000 or JPY 1,000,000, making them well-suited for the individual investor.

#### **The Bottom Line**

*Exchange rate risk cannot be avoided altogether when investing overseas, but it can be mitigated considerably through the use of hedging techniques. The easiest solution is to invest in hedged investments such as hedged ETFs, because the fund manager can hedge forex risk at a relatively lower cost. However, an investor who holds foreign-currency stocks or bonds, or even American depository receipts should consider hedging exchange rate risk using one of the many avenues available such as currency forwards, futures, ETFs or options.*